

REMARKS

Claims 12-14, 16-22, 26-29 and 33-42 are pending. Claims 12, 28 and 29 are amended. Claims 26, 27, 33-38 are cancelled without prejudice or disclaimer. The support for Claim 12 is found in the original specification at Example 1, p.26; p.31, lines 1-9 and claim 26. Claims 39-42 have been added. Support for the new claims 39-42 are found in, for example, Claim 12. No new matter has been added.

Claims 12, 14, 16-19, 26, 28, 33, and 35 remain rejected under 35 USC § 103 (a) as being unpatentable over combination of Mulyowidarso et al (Mulyowidarso et al, The microbial ecology of soybean soaking for tempe production, International Journal of Food Microbiology, 8 (1989) 35-46), and Inagawa et al (Homeostasis as regulated by activated macrophage. II. LPS of plant origin other than wheat flour and their concomitant bacteria, Chem. Pharm. Bull. 40 (4) 994-997, 1992), and further in view of Matsuo et al (Matsuo et al, Suppression of plasma cholesterol elevation by Okara tempe in rats, Bioxci Biotech Biochem 57(7): 1188-1190, 1993).

One feature of the present invention lies in that the efficient and inexpensive fermentation and culturing method of the instant invention enables it to obtain immunopotentiators contained in plants themselves as well as in bacterial components or products, which bacteria live in a symbiotic relationship with the plants. In order to achieve this, *Pantoea agglomerans* is used for fermentation of edible plants such as food grain, a seaweed or a bean curd refuse. *Pantoea agglomerans* contains a low molecular weight lipopolysaccharide effective for immunostimulation as a component.

The Office Action stated on p.6, lines 1-7:

It would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use solely Enterobacter agglomerans to culture soybean since Mulyowidarso et al teach significant contributions were made by Klebsiella pneumoniae, Klebsiella ozaenae, Enterobacter cloacae, Enterobacter agglomerans. Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time the invention was made to use any single microbial contained in the mixture of Mulyowidarso et al to culture the edible plant.

The Applicant respectfully disagrees. Mulyowidarso shows microbial fermentation of complex ecology, develops during soaking of soybean. Mulyowidarso concluded that *L. casei*, *Strep. faecium* and *Staph. epidermidis* were responsible for the *pH reduction during soaking* conducted during procedure of making Soybean tempe. The Office Action cited the abstract of Mulyowidarso as showing a significant contribution made by several species including *Enterobacter agglomerans*. However, Mulyowidarso actually discloses the following:

Several species of the family Enterobacteriaceae, namely, *C. diversus*, *E. agglomerans*, *E. cloacae*, *K. pneumoniae* and *K. ozaenae*, also contributed to the ecology of fermentation during the early stage of soaking. These species did not survive until the end of fermentation at 37 and 30°C, presumably because of the acid condition which had developed by that stage. (Mulyowidarso, p. 44, 3rd paragraph)

Contrary to those species, the claimed invention works at about 37°C in fermentation using medium from an edible plant. Also, the medium of the claimed invention is kept in *neutral pH* during fermentation. Please see Examples 2, 18, 20 and 22, for example.

Inagawa disclosed that *P. agglomeranse* was isolated from wheat and it contains LPS. However, Inagawa does not disclose that *P. agglomeranse* was fermented in edible plants containing medium with specific conditions.

In addition, Mulyowidarso relates to soybean tempe which is fermented and *acidified* in certain point during the fermentation. Inagawa is silent about fermentation of *P. agglomeranse* under acidic condition. Thus, there is no motivation for skilled artisan to combine Mulyowidarso with Inagawa and even if both are combined, skilled artisan would not achieve the instant invention, which is a different process.

Accordingly, there exists no teaching for one of ordinary skill in the art at the time the invention was made to use the any single microbial contained in the mixture of Mulyowidarso et al to culture the edible plant.

As to Matsuo et al, Matsuo et al merely discloses fermentation of Okara (bean curd refuse) by *Rhizopus oligosporus*. *R. oligosporus* was fermented under *acidic condition (pH 5.4)* at 30°C (page 1189, left column, under “preparation of OT”). Meanwhile, as stated above,

microorganisms in Mulyowidarso “did not survive until the end of fermentation at 37 and 30°C, presumably because of the acid condition which had developed by that stage” (page 44, 3rd paragraph). Thus, there is no motivation for skilled artisan to combine disclosure of Mulyowidarso with that of Matsuo et al and even if both are combined, skilled artisan would not achieve the instant invention.

Accordingly, it would not have been obvious for one of ordinary skill in the art at the time the invention was made to use the fermented homogenized soybean product from Matsuo et al even though Matsuo et al teaches Okara tempe as a new high fiber and low energy soybean food stuff.

Without more disclosure of the instant method steps, the invention now claimed is not taught or suggested by the combination of references. It is respectfully requested that the rejection be reconsidered and withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105.

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Customer No. 21874

Respectfully submitted,

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